

Career and Technical Education Board Report – December 2025

The mission of Career and Technical Education (CTE) is to empower students to transition successfully into post-secondary and career opportunities, with their achievements reflecting the program's impact on developing technical and academic skills that prepare them for high-demand jobs.

CTE Goals:

1. Explore career interests and plan for postsecondary and career opportunities through work-based learning experiences.
2. To increase the number and types of industry certification and training opportunities available for BISD students and CTE teachers.
3. To provide additional dual enrollment (college credit) opportunities for students in high school.
4. To encourage and support participation in Career and Technical Student Organizations (CTSO's) in all program areas such as FFA, SkillsUSA, HOSA, TAFE, and FCCLA where students participate in leadership and develop life-long skills such as interpersonal relationships, teamwork, setting and achieving goals as well as competing in contests where they apply what they have learned in their respective CTE courses in real-world scenarios.

Brownwood ISD's CTE programs offer a sequence of courses that provide students with coherent and rigorous content. This content aligns with challenging academic standards and the relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions. CTE allows students to train for high-skill, high-wage, and high-demand careers. These programs also prepare students to be successful in a rapidly changing workforce and equip them to make informed decisions about future college and career pathways.

Brownwood ISD offers five endorsements:

1. Business & Industry
2. Public Service
3. Arts & Humanities
4. Multi-Disciplinary
5. STEM (Science, Technology, Engineering, Mathematics)

Brownwood ISD's CTE programs benefit from partnerships with Ranger College, TSTC, Hendrick Medical Center, Bruner Chevrolet, Big Country Ford, and local pharmacies and nursing homes, whose input guides regional funding, program implementation, and expansion efforts.

CTE Programs/Courses Offered at BHS:

FAA Drone Pilot Certification (STEM/Business & Industry)

This program, in partnership with Ranger College, demonstrates our students' dedication and skill, as they have completed all requirements to pass the FAA drone pilot exam, including safety, regulations, flight operations, and mission planning, through hands-on training with industry-standard drones, marking a significant achievement.

Photography/Graphic Design (Business & Industry)

Yearbook and Photo 2:

Students in the Photography/Graphic Design program have just completed yearbook portraits for the entire high school, including staff. The students photographed over 3500 images in 3 days, showcasing their hands-

on experience and the practical skills they have developed. Their work is a testament to the quality of our CTE programs.

Yearbook, Photo 2, and Graphic Design 1-2:

Students will start removing blemishes and reducing glare on the yearbook portraits next week. When they finish, the students will have provided professional services for 900+ students and staff!

Photo 1:

Students are currently practicing manual mode photography, balancing shutter speed, aperture, and ISO. They will take an oral exam in December to demonstrate their skills.

Video Program:

Students in the Video Program have finished staffing the film crew at Gordon Wood Stadium, demonstrating their active involvement and the real-world experience they are gaining. Their participation is a key part of their learning process, and we are excited to share their progress.

Video 2 & 3:

Students have begun filming a short film that will conclude in December.

Automotive Technology (Business & Industry)

In automotive technology, students gain knowledge and skills in the repair, maintenance, and servicing of vehicle systems. The focus of the introductory course is to teach safety, tool identification, proper tool use, and employability. In the advanced classes, BHS has partnered with Ranger College. Thanks to the P-TECH grant, the automotive program has acquired a state-of-the-art Hunter alignment machine. Ranger College has also contributed by providing testing and diagnostic equipment for our students. While the grant funding has been fulfilled, the benefits of these new tools and technologies continue to enrich the BHS automotive program. Bruner Auto Group has donated electrical components, an engine, and a transmission for students to work on and understand through a Toyota support program. Students (juniors and seniors) are taking OSHA 10 certifications and ASE entry-level certifications.

Education and Training (Public Service)

Principles of Education:

Students have studied and researched the characteristics of a great teacher, the history of education in the United States, and educational theories. They have worked individually and in groups to create projects based on their learning, and then presented those projects to the class using practical presentation skills.

Practices in Education/Practicum in Education:

The BHS Educational Interns have been busy this semester! The Fall Internship began on October 15, and interns were placed with a mentor teacher in BISD elementary and middle school classrooms across the district to observe, collaborate, plan, and teach in real-world situations with actual students. Interns are currently serving in 16 classrooms across 6 BISD campuses. They have participated in Red Ribbon Week and Thanksgiving activities, taught small groups, pulled out students for more targeted instruction, led read-alouds in literacy classes, helped teachers prepare activities and lessons, coached students in PE classes, and so much more that comes with teaching and coaching students!

In our classroom, they have received instruction and training in Interactive Read Alouds, Guided Reading, and Shared Reading. They have watched all teacher compliance videos, studied the Code of Ethics for Texas Educators, and learned classroom management techniques. On October 2, interns participated in a lecture and discussion with Mrs. Danielle Howard on being trauma-informed teachers. Currently, students are

working in groups to collaborate and create themed bulletin board displays in our high school classroom and hallway.

On October 24, interns had the opportunity to participate in the First Annual Future Global Leaders' Summit at Tarleton State University. Students learned qualities that make a leader effective at the local and global levels, practical communication skills, and how a positive mindset is a leadership tool that transforms teams. Students were also challenged to make connections and collaborate with other student leaders from districts in our area.

Welding (Business & Industry)

The Brownwood Welding Program offers a wide range of skills, experience, and opportunities for students to compete in shows or through organizations like SKILLS USA. The introduction course, Ag Mechanics, provides students with basic welding knowledge, skills, and hands-on experience. Then, students can choose to start Dual Credit Welding through Ranger College and earn a 16-credit-hour Level 1 welding certificate. Ranger College has provided machinery that now enables the shop to run four welding processes (GMAW, SMAW, FCAW, GTAW).

Culinary Arts (Business & Industry)

Culinary Arts emphasizes the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. Intro to Culinary Arts is designed for beginners to learn basic food preparation skills, while Culinary Arts and Advanced Culinary Arts focus on preparation techniques, recipe reading, and cooking methods. Students are introduced to regional and global foods. The culinary arts classes had some Halloween fun and were allowed to create their designs. They most recently helped serve the Thanksgiving meals at the elementary campuses.

Health Science (Public Service)

The Health Science pathway at Brownwood High School continues to be a positive experience for students driven to be future healthcare providers. There are 10 students in the Certified Nursing Assistant Program, 25 Students in the Health Science Clinical Rotation, and 12 students in the Pharmacy Technician Program. Each of these students is part of the clinical experience, where they get to shadow community members. Some of the businesses that support our program are Brownwood Nursing and Rehab, Early Care Inc., Pecan Bayou Nursing Home, Docs Pharmacy in Brownwood and Early, Walgreens, Austin Avenue Pet Clinic, Kirkland Dentistry, Kings Physical Therapy, Jacob's Family Pharmacy and Hendrick Medical Center. We expect a high number of senior students to obtain certifications in the spring. The health science program also partnered with the Big Country Area Health Education Center (AHEC) for the second year in a row to have scrubs donated to our junior clinical students. This partnership allows students to attend a junior scholar day at a local college that provides hands-on learning in skills related to the healthcare field.

BHS currently has 105 members in HOSA. Recently, the HOSA officers organized a Halloween meeting, a blood drive, and a community service opportunity with Good Samaritan. HOSA is truly a student-led organization, with student officers leading it as a servant organization that strives to build leadership and health science knowledge within our student population. HOSA members will participate in district online testing in December, with the chance to advance to the Area competition in January.

Another group that is promoting mental health on our BHS Campus is our HOSA Mental Health Promotion team. For their event, they are encouraged to create a social media campaign to improve mental health among their target audience. The students chose to focus on the first-year students in the health science program.

FFA (Business & Industry)

FFA stands for Future Farmers of America, an organization that helps students develop their leadership, personal growth, and career success through agricultural education. Brownwood FFA had a great showing at the Cross Timbers District LDE competition, advancing three teams to the area, and had four teams right on the bubble!

3M Safety Roadshow Inspires Brownwood High School Students to Explore STEM and Skilled Trades Careers

Brownwood High School (BHS) students gained valuable, real-world insight into technical careers during a visit from the 3M Safety Roadshow on Thursday, October 2, 2025. Complete with a large mobile safety center trailer packed with professional-grade equipment, the interactive event is designed to help students explore future paths in Science, Technology, Engineering, and Math (STEM) and the skilled trades by highlighting the critical importance of workplace safety and hands-on innovation.

Students from a wide range of Career and Technical Education (CTE) classes were introduced to the Occupational Safety and Health Administration (OSHA) and the vital role of safety standards in professional environments. Students had the opportunity to enjoy a dynamic presentation that allowed them to work directly with 3M employees. This hands-on experience emphasized essential workplace skills such as teamwork, communication, and critical thinking, sparking student interest in the dynamic fields of STEM and various trades.

Partnerships between Brownwood ISD and local industry leaders, such as 3M, continue to provide our students with practical knowledge and direct exposure to potential career pathways, preparing them for success after graduation.

New Certification Offerings

Teaching and Training: Educational Aide


Culinary Arts: Food Protection Manager

Animal Science: Elanco Fundamentals of Animal Science Certificate

Plant Science: BASF-Plant Certification

Below are the current Endorsement/Certification(s) available through the BISD CTE program

**Brownwood High School Endorsements
Course Levels**

Endorsement	Sequence/Pathway	Level 1	Level 2	Level 3	Level 4	Certifications
STEM (Science, Technology, Engineering & Math)	Science Option	Biology /Biology Pre AP	Chemistry/ Chemistry Pre AP	Physics/OnRamps Physics	Two additional science courses (e)(6)	
	Math Option	Algebra I/Alg I Pre AP or Geometry/Pre AP Geometry	Geometry/Pre AP Geometry or Alg II/Pre AP Alg II	Alg II/ Alg OnRamps or PreCal/ PreCal OnRamps	Two additional mathematics courses for which Algebra II is a prerequisite	
	Programming and Software Development	Computer Science 1	Computer Science 2	Computer Science 3	Indep. Study in Evolving/Emerg. Technologies or Indep. Study in Tech Appl	FAA Remote Pilot Certification or Networking+
	Plant Science	Principles of Agriculture, Food, and Natural Resources	Floral Design	Greenhouse Operations and Production	Advanced Plant Soil Science	TSFA Knowledge Based Certification
Business & Industry	Animal Science	Principles of Agriculture, Food, and Natural Resources	Small Animal Management and Equine Science	Livestock Production	Advanced Animal Science	TCFA Technician
	Digital Communications	Audio Video Production I	Audio Video Production II	Practicum of Audio/Video		Adobe Certified Associate Premiere Pro
	Graphic Design & Interactive Media	Commercial Photography I	Commercial Photography II	Graphic Design and Illustration I	Graphic Design and Illustration II	Adobe Certified Associate in Photoshop
	Accounting and Financial Services	Foundations of Business Communication and Technologies	Accounting I	Accounting II	Securities and Investments	Microsoft Office Specialist-Word Expert
	Culinary Arts	Introduction to Culinary Arts	Culinary Arts	Advanced Culinary Arts	Food Science	Food Handler; ServSafe Managers
	Welding	Introduction to Welding	Welding 1	Welding 2		
	Agricultural Technology and Mechanical Systems	Principles of Agriculture, Food, and Natural Resources	Agricultural Mechanics and Metal Technologies	Agricultural Structures Design and Fabrication + Agricultural Laboratory and Field Experience	Agricultural Equipment Design and Fabrication + Agricultural Laboratory and Field Experience	AWS D1.1 Certification AWS D8.1 Certification
	Architectural Drafting and Design	Principles of Architecture	Architectural Design I	Architectural Design II	Career and Technical Education Project-Based Capstone	
	Automotive and Collision Repair	Principles of Transportation Systems	Automotive Basics	Automotive Technology I: Maintenance and Light Repair	Automotive Technology 2: Automotive Service	OSHA 30-Certification; ASE Entry-Level Certification: Engine Repair (ER); Automatic Transmission/Transaxle (AT); Brakes (B); Electronic/Electrical Systems (ES); Heating and A/C (AC); Manual Drive Train and Axles (MDT); Mechanical and Electrical Components (ME)
	Public Service	Teaching and Training	Principles of Education and Training	Human Growth and Development	Instructional Practices	Practicum in Education and Training
Diagnostic and Therapeutic Services		Principles of Health Science	Medical Terminology	Anatomy and Physiology	Pathophysiology	
		Principles of Health Science	Medical Terminology	Health Science Theory	Practicum in Health Science-CNA or Practicum in Health Science- Pharmacy Tech	
		Principles of Health Science	Medical Terminology	Health Science Theory- Health Science Clinical	Practicum in Health Science-CNA or Practicum in Health Science- Pharmacy Tech	Pharmacy Technician or Certified Nurse Aide/Assistant Certification; NCHSE ; CPR
Arts & Humanities	Fine Arts	Any first year fine art including Art, Band, Choir, or Theater	Fine Art Year 2	Fine Arts Year 3	Fine Arts Year 4	
	Foreign Language	Four levels of the same language; or two levels of the same language and two levels of a different language				
	Social Studies	5 Social Studies Classes				
Multidisciplinary Studies	Four advanced courses within one endorsement area or among endorsement areas but not in a coherent sequence.					
	Four credits in each of the four foundation subjects (Must include English IV, Chemistry, Physics)					
	Four credits in advanced placement or dual credit courses. The four credits in AP and/or DC must include courses in English, Math, Science, Social Studies, Economics, LOTE or Fine Arts					
It is the policy of Brownwood ISD, not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and section 504 of the Rehabilitation Act of 1973, as amended. Brownwood ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. Brownwood ISD will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and vocation programs. For information about your rights or grievance procedures, contact Brownwood ISD at (325) 643-5644.						
Es política de Brownwood ISD no discriminar por motivos de raza, color, origen nacional, sexo, discapacidad o edad en sus prácticas laborales según lo exige el Título VI de la Ley de Derechos Civiles de 1964, según enmendada; Título IX de las Enmiendas Educativas de 1972; la Ley de Discriminación por Edad de 1975, según enmendada; y la sección 504 de la Ley de Rehabilitación de 1973, según enmendada. Brownwood ISD no discrimina por motivos de raza, color, origen nacional, sexo, discapacidad o edad en sus programas o actividades y brinda igualdad de acceso a los Boy Scouts y otros grupos juveniles designados. Para más información sobre sus derechos o presentación de quejas, favor de contactar a Brownwood ISD al (325) 643-5644.						
Please visit our CTE website for more information.						

*Courses subject to change

